

## 1    **ABSTRACT OF THE DISCLOSURE**

2            A hypocycloid reducing apparatus includes a hollow outside bracket, a  
3    hollow inside bracket and a driven input that is rotated by a rotating mechanism,  
4    such as a motor. The outside bracket has a passage with N quantity of lobe  
5    grooves. The inside is rotatably mounted in the passage of the outside bracket  
6    and has an inner space, M quantity of through holes and an output shaft. The  
7    through holes are arranged in an annular arrangement, are aligned with the lobe  
8    grooves and each through hole holds a roller. The driven input is mounted  
9    rotatably in the inner space and has an off-center assembly to encounter  
10   sequentially with each roller to actuate rotating the inside bracket. Therefore, a  
11   speed of revolution of the rotating mechanism is reduced to the output shaft. A  
12   volume of the reducing apparatus is minimized, as is noise produced during  
13   operation.